

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
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c/o DISCOVERY DISPATCH
9003 FLORIN WAY
UPPER MARLBORO, MD 20772

PCT

WRITTEN OPINION

(PCT Rule 66)

8 DEC 04

Date of Mailing
(day/month/year) **08 OCT 2004**

Applicant's or agent's file reference

1133/4

REPLY DUE

within 2 months/days from
the above date of mailing

International application No.

PCT/IL03/00434

International filing date (day/month/year)

26 May 2003 (26.05.2003)

Priority date (day/month/year)

26 June 2002 (26.06.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): F02C 3/14, 3/34, 7/18 and US Cl.: 60/39.34, 39.35, 750, 806

Applicant

R-JET ENGINEERING LTD

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☒ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 26 October 2004 (26.10.2004)

Name and mailing address of the IPEA/US

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Authorized officer

Ted Kim

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I. Basis of the opinion

1. With regard to the elements of the international application: *

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-23, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- ☒ the claims:
 pages NONE, as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages NONE, filed with the demand
 pages 24-27, filed with the letter of 01 June 2004 (01.06.2004).
- ☒ the drawings:
 pages 1-12, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- ☐ the sequence listing part of the description:
 pages NONE, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

WRITTEN OPINION

International Application No.

PCT/IL03/00434

IV. Lack of unity of invention

1. In response to the invitation (Form PCT/IPEA/405) to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
☐ paid additional fees.
☐ paid additional fees under protest.
☒ neither restricted nor paid additional fees.

2. This Authority found that the requirement of unity of invention is not complied with for the following reasons and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees:

3. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this opinion:

- ☐ all parts.
☒ the parts relating to claims Nos. 1-10 (Group I).

WRITTEN OPINION

International Application No.
PCT/IL03/00484

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims <u>NONE</u> 5-8	YES
	Claims <u>1-4, 9</u>	NO
Inventive Step (IS)	Claims <u>5, 6</u>	YES
	Claims <u>1-4, 7-9</u>	NO
Industrial Applicability (IA)	Claims <u>1-9</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1, 2, 9 lack an inventive step under PCT Article 33(3) as being obvious over Karlby et al (2,784,551). Karlby et al do not teach a substantially annular flame holder but teaches the flameholders may be of any suitable cross section (col. 6, lines 72 +). As is well known in the flame holder art, annular cross sectional configurations are well known. It would have been obvious to one of ordinary skill in the art to employ an annular flame holder, as a well known cross section used in the art.

Claims 1, 2, 7-9 lack novelty under PCT Article 33(2) as being anticipated by Guirguis (4,897,995). Guirguis teach a rotating assembly with primary compressor 4a, inner casing (bottom of step of 5) and compressor driving turbine nozzle wheel 6; an outer casing 5c, a combustion chamber 5a defined between the with primary compressor, inner casing, compressor driving turbine nozzle wheel and outer casing, a substantially annular flame holder is the bluff portion of 5 surrounding the bottom of the step of 5.

Claims 1-4, 9 lack novelty under PCT Article 33(2) as being anticipated by Levesque (4,368,619). Levesque teaches a rotating assembly with primary compressor 28, inner casing 66 and compressor driving turbine nozzle wheel 113; an outer casing 10, a combustion chamber 88 defined between the primary compressor, inner casing, compressor driving turbine nozzle wheel 113 and outer casing, a substantially annular flame holder (either 60 or 88 can be considered part of the flame holder as the flame is inherently held in both stages of the combustor).

Claims 5, 6 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the tubular element dividing the compressor airflow.

Claims 1-9 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----

WRITTEN OPINION

International Application No.
PCT/IL 434

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.